

A STUDY OF ASSOCIATION BETWEEN OBESITY AND LIPID PROFILE

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ABSTRACT

Introduction

Obesity is the accumulation of excess body-fat, due to greater energy intake when compared to the energy expenditure leading to increased BMI. The metabolic defects in obesity includes altered lipid profile along with increased risk of cardiovascular diseases, diabetes, hypertension, dyslipidemia, and elevated serum uric acid. In this study we have tried to find out association of lipid profile with obesity.

Material and Method

This study was conducted in the Department of Biochemistry, GMC kota. 50 case samples and 50 control samples were taken. Serum was separated and serum lipid profile levels were estimated by fully Automated Analyzer ERBA EM 360. Data was analyzed on Excel sheet and results obtained using Student's unpaired t- test and Pearson's correlation.

Result

Cases have significantly higher values for serum lipid profile levels except HDL-Cholesterol as compared to controls and have significant positive correlation with BMI.

Conclusion

Obesity is associated with increased serum lipid profile levels except HDL-Cholesterol. Therefore, patients presenting with this biochemical abnormality are recommended to be investigated for obesity and vice versa.

KEYWORDS: Obesity, BMI, Cholesterol, Triglyceride, HDL, VLDL, LDL